

NOTES

It would be well if our men of science were to be found more frequently distributing prizes and taking an interest in the schools in which, thanks to the wisdom and energy of Mr. Cole, so many thousands of our people are learning science. In this Prof. Williamson has just set a good example by distributing the prizes at the Keightley School of Science and Art on Thursday last. Prof. Williamson, at the end of his speech, remarked that "We in this country give a peculiar position to Science in relation to material affairs. If we find a coal-seam we look upon it as wasteful not to work it and make the most of it, but what he said was, that to leave the clear heads and true hearts of our countrymen left useless was a greater waste, because he believed that they were infinitely more valuable than any coal-seam that ever was discovered."

AN anonymous donor has placed a large sum in the hands of the Committee of the Birmingham and Midland Institute, for the foundation of a Lectureship on the Laws of Health, and also for a prize fund in connection with the class. Dr. Corfield has been offered the post for this year, has accepted it, and will deliver an inaugural lecture in the Town Hall, Birmingham, on Thursday, October 9, at 8 P.M., on "Sanitary Progress." The course will begin on Tuesday, October 14, at 8 P.M., and be continued on succeeding Tuesdays until some time in April. It is intended more especially for the working classes, and both men and women will be admitted.

THE programme of the Birmingham and Midland Institute for Session 1873-4 is a very full one, and, to judge from what is set down, is well organised in its departments, and doing a thoroughly good educational work among all classes of the populous and important district in the midst of which it is established. At a merely nominal fee it places valuable scientific instruction within the reach of the poorest artisan.

SIR SAMUEL and Lady Baker left Alexandria for London on Tuesday.

WE would draw our readers' attention to a letter from Professor Thiselton Dyer, in this week's number, on the Oxford Fellowships in Science about to be competed for. We hope that, at any rate, the matter of Research will be taken into consideration.

NEXT year's meeting of the American Association for the Advancement of Science will be held at Hartford, Conn., and the officers elect are:—President, Dr. John L. Le Conte, of Philadelphia; Vice-President, Prof. C. S. Lyman, of New Haven; Gen. Sec., Dr. A. C. Hamlin, of Bangor; Treasurer, Mr. W. S. Vaux, of Philadelphia.

THE Italian Association for the Advancement of Science meets on the 20th inst.

THE business of the Social Science Congress opened at Norwich yesterday, with a meeting of the Council, after which there was a special service in the Cathedral; and in the evening the inaugural address was delivered by the President. To-day the exhibition of sanitary and educational apparatus and appliances at the Drill Hall, kindly lent for the occasion, will be opened with an address by the High Sheriff of Norwich. The address of the President of the Council, Mr. G. W. Hastings, will follow, after which the departments will meet in their respective rooms, and in the evening a *soirée* will be given by the local Executive Committee in St. Andrew's Hall. On Friday morning Mr. Joseph Brown, Q.C., will deliver his address as president of the Department of Jurisprudence and Amendment of the Law; and after the meetings of the various departments for the reading and discussion of papers, a working men's meeting in St. Andrew's Hall, at which the Mayor will preside, will conclude the business of the day. On Saturday

an address on education will be delivered by Prof. W. B. Hodgson, LL.D., and after the rising of the departments the President of the Congress will distribute the certificates and prizes to the successful candidates at the last Cambridge middle-class examination. The address of Capt. Douglas Galton, C.B., F.R.S., president of the Health Department, will be given on Monday morning. The departments will meet as usual in their respective rooms, and in the evening a grand concert will be given in St. Andrew's Hall. Mr. Thomas Brassey, M.P., will deliver his address on Economy and Trade on Tuesday, and after the business of the departments a *soirée* will be given in St. Andrew's Hall by the Mayor, and the concluding meeting, preceded by a meeting of the Council, will be held on the Wednesday. In connection with the Congress there will be a conference on female education, and in the Exhibition short addresses will be delivered daily in the afternoon on the subject of the articles exhibited in the various classes. Excursions to various places, it is understood, are being arranged.

THE *Diana*, screw steamer, in which Mr. B. L. Smith left Dundee in May last on a voyage of discovery to the Polar Seas, by the Spitzbergen route, arrived in Dundee on Saturday last. The *Daily News* sums up the voyage of the *Diana* as follows:—A succession of gales was experienced—the weather on almost all occasions when the ship was in the open sea being such that, although she was provided with complete apparatus for sounding, deep-sea temperatures, &c., not nearly what was intended has been accomplished. Owing to the unfavourable nature of the ice, little in the way of exploration has been possible. The time had, however, been very fully occupied in dredging, trawling, photographing, surveying, and making as complete and perfect collections as circumstances permitted of the flora of Spitzbergen. Specimens of rare birds have been secured, and collections made, probably the first of any value. The collections of marine plants and animals are likely to prove especially interesting, and it has been discovered, among other things, that some parts of those seas hitherto reported as almost destitute of fish, abound in cod of excellent quality. In the way of geology everything possible was done in the parts unexplored by the Swedes, and numerous specimens of fossils have been brought back from the hitherto unvisited parts of the coast of the north-east land. From the appearance of open water seen in this expedition beyond Cape Platen, and also reported by the Swedes as existing—ascertained during their sleigh journey—it seems to be by no means certain that the route farther northwards which the *Diana* on leaving England hoped to reach does not exist, and the question still remains open, were it possible to reach this early in the season, whether a means of reaching a higher latitude to the north-east of Spitzbergen is not available. Mr. Smith has ascertained that the North Cape is situated on an island separated by a sound from the main land, and to this extent a knotty point has been determined. The expedition never got beyond 81°, while Mr. Smith in his expedition of 1871 got to 81°24'. He states that the *Diana* behaved admirably, but he did not realise his anticipations which would be achieved by the substitution of steam for sailing power.

WITH reference to our announcement of the forthcoming work by Mr. Boyd Dawkins on Cave Hunting,—the new line of inquiry which has added so much to our knowledge of ancient man,—we may now state the work will comprise the physical history of caves and their relation to the general physical geography of the district, as well as the history of their contents; and will treat of the men who have inhabited the caves of France, Spain, and Britain, during the historic, pre-historic, and pleistocene ages. The subject bristles with problems ethnological, archaeological, and geographical, and demands a careful criticism that will sift the certain from the uncertain. The evidence will be given from which it may be concluded that the Eskimós lived as

far to the south as the Pyrenees in the palæolithic age, and that the Basque or Iberic population ranged as far north as the British Isles.

THE "Astronomical Observations taken during the years 1870-72, at the private observatory of Mr. Joseph Gurney Barclay, Leyton, Essex," by Mr. C. G. Talmage, contains well-arranged tables of double star observations, followed by copious notes on the observations, and occultations, and phenomena of Jupiter's satellites. Mr. Barclay thinks it so advisable to reduce and print observations at short intervals, that he has determined, wisely we think, to adopt the plan without waiting for a number to form a large volume.

AMONG Messrs. Smith, Elder and Co.'s announcements of forthcoming works, we observe the following:—A translation of Prof. "Hermann's Elements of Physiology," by Dr. Arthur Gamgee; and "A Text Book of Pathological Anatomy," by John Wyllie, M.D., Lecturer on General Pathology at the School of Medicine, Surgeons' Hall, Edinburgh.

AMONG Mr. Robert Hardwicke's autumn announcements we notice the following scientific books—"Man and Apes:" an Exposition of Structural Resemblances and Differences bearing upon questions of affinity and origin, by St. George Mivart, F.R.S. This work will be published simultaneously in America and England. "Waste Products and Undeveloped Substances:" a synopsis of progress during the last quarter of a century at home and abroad, by P. L. Simmonds, the editor of the "Journal of Applied Science." "Where there's a Will there's a Way; or, Science in the Cottage," by James Cash; being an account of the labours and lives of some north-country botanists in humble life. "The British Hepatica," with descriptions by Dr. Carrington, and drawings by J. E. Sowerby. This will be issued in twelve monthly parts. "Hooker's Synopsis Filicum," a new edition brought up to the present time by J. G. Baker, Royal Herbarium, Kew. "On Mounting Microscopic Objects," by Thomas Davies. A new edition, much enlarged, by John Matthews, M.D., F.R.M.S. This last-named work is nearly ready for publication.

THE library of the Manchester Athenæum was destroyed by fire on Sept. 24. The damage, estimated at 10,000*l.*, is said to be wholly covered by insurance.

WE have received the programme of the Edinburgh Veterinary College. We hope that, under the superintendence of the new Principal, Prof. Fearnley, this important institution will become more prosperous than it has ever been, and that the principles of the veterinary art will be taught in a thoroughly scientific way. That this is likely to be the case may be seen from the following list of professors:—Dr. Balfour, F.R.S., Dr. Murie, Mr. Dewar, F.R.S.E., Dr. Young, and Mr. Wally.

THE following are some of the most important recent additions to the Brighton Aquarium:—2 Octopus (*O. vulgaris*); 1 Group of Barnacles (*Lepas Hillii*); 30 Sea-horses (*Hippocampus ramulosus*); 5 African Crocodiles; 2 Alligator Terrapins (*Chelydra serpentina*); 1 Edible Turtle (*Chelonia midas*); 1 Sturgeon (*Acipenser sturio*).

THE additions to the Zoological Society's Gardens during the past week include a Brown Capuchin (*Cebus fatuellus*) from Guiana, and two Bonnet Monkeys (*Macacus radiatus*) from India, presented by Lord Louth; two Crested Ground Parakeets (*Calopsitta nova-hollandie*) from Australia, presented by Miss L. E. Lyon, and two hatched; four Alpacas (*Lama pacos*), two Llamas (*Lama feruana*) from Peru, a Vicuña (*Lama vicugna*) from South America; a Cuvier's Gazelle (*Gazella cuvieri*) from Muscat; a Sultry Hermipode (*Ortyxelos miffreni*) from West Africa; a Southern Mynah (*Acridotheres mahrattensis*) from S. India, deposited; a Philantomba Antelope (*Cephalophus maxwelli*) from Sierra Leone, received in exchange.

MOLECULAR EVOLUTION

AT quite uncertain times and places
The atoms left their heavenly path,
And by tortuous embraces
Engendered all that being hath.

And though they seem to cling together
And form "associations" here,
Yet, late or soon, they burst their tether,
And through the depths of space career.

So we, who sat, oppressed with Science,
As British Asses, wise and grave,
Are now transformed to fierce Red Lions,
As round our prey we ramp and rave.

Thus by a swift metamorphōsis,
Wisdom turns wit, and Science joke;
Nonsense is incense to our noses,
For when Red Lions speak they smoke.

Hail, Nonsense! dry nurse of Red Lions,*
From thee the wise their wisdom learn,
From thee they cull those truths of science
Which into thee again they turn.

What combinations of ideas
Nonsense alone can wisely form,
What sage has half the power that she has
To take the towers of Truth by storm?

Yield, then, ye rules of rigid reason!
Dissolve, thou too, too solid sense!
Melt into nonsense for a season,
Then in some higher form condense.

Soon, ah! too soon, the chilly morning
This flow of soul will crystallise,
And those who nonsense now are scorning
May learn too late where wisdom lies.

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THE BRITISH ASSOCIATION

WE are glad to say that the attendance at the Bradford Meeting was considerably larger than was at first stated. The total number of persons who attended the meeting is 1,983, and the total amount received, 2,102*l.*

The following is a list of the grants of money appropriated to scientific purposes by the General Committee:—

	<i>£</i>	<i>s.</i>	<i>d.</i>
<i>Mathematics and Physics</i>			
Cayley, Prof.—Mathematical Tables	100	0	0
Cayley, Prof.—Printing Mathematical Tables ...	100	0	0
Glaisher, Mr. J.—Efficacy of Lightning Conductors (renewed)	50	0	0
Balfour Stewart, Prof.—Mauritius Observatory ...	100	0	0
Balfour Stewart, Prof.—Magnetism of Iron ...	20	0	0
Brooke, Mr. C.—British Rainfall	100	0	0
Glaisher, Mr. J.—Luminous Meteors	30	0	0
Tait, Prof.—Thermo-Electricity (renewed) ...	50	0	0
Williamson, Prof. A. W.—Testing Siemens' Pyrometer (renewed)	30	0	0

<i>Chemistry</i>			
Brown, Prof. Crum.—High temperature of Bodies (partly renewed)	70	0	0
Williamson, Prof. A. W.—Records of the Progress of Chemistry	100	0	0
Gladstone, Dr.—Chemical Constitution and Optical Properties of Essential Oils	10	0	0
Armstrong, Dr.—Isomeric Cresols and their Derivatives	20	0	0

Carried forward *£*780 0 0

* "Leonum arida nutrit."